selected using the PharMetrics Patient-Centric Database. All patients were assumed to be on original therapy for the first month, with discontinuation rates derived from the subsequent 11-month period. Medical costs were estimated based on payer reimbursements for all services rendered to TOL and OXY patients matched for demographic and pretreatment clinical characteristics. Subsequent costs for those who discontinued therapy were based on patients receiving medical management without drug therapy (n = 29,992). Costs for drugs were provided by AnalySource (October 2004). **RESULTS:** After the 11-month follow-up period, 21% of TOL and 15% of OXY patients remained on original therapy. Mean total health care costs per patient were $8876/y for those originally on TOL and $9080/y for those started on OXY. Sensitivity analyses indicated that results were robust to changes in drug cost and probability of discontinuation. When persistence was held equal, cost differences continued to favor TOL: 21% = $272/year and 15% = $233/year. Furthermore, for the model to result in equivalent annual health care costs, TOL cost must increase by $1.50/day or OXY cost must decrease by $1.62/day. **CONCLUSIONS:** At the end of one year, OAB patients were more likely to remain on original treatment taking TOL versus OXY. This resulted in a total health care cost savings of $204 per patient.

PUK4

A COMPARISON OF TOTAL DIRECT MEDICAL COSTS AMONG PATIENTS RECEIVING AGENTS USED IN THE PHARMACOLOGIC MANAGEMENT OF OVERACTIVE BLADDER

Harris HM[1], Del Aguila MA[1], Beaulieu JF[1], Boccuzzi SJ[1], Jumadilova Z[2], Wagner S[3]
[1]Aetna Health Information Solutions, Blue Bell, PA, USA; [2]Pfizer, Inc, New York, NY, USA; [3]Pfizer, Inc, Aubrey, TX, USA

OBJECTIVE: We compared the direct health care costs for patients receiving different prescription pharmacologic agents for overactive bladder (OAB) symptoms in a managed care setting. **METHODS:** We used administrative medical and pharmacy claims data from >30 managed care plans. Patients newly diagnosed with OAB who initiated treatment with tolterodine extended release (TOL ER), oxybutynin extended release (OXY ER), or oxybutynin immediate release (OXY IR) were followed for 12 months from the date of initial diagnosis. Patients were required to be continuously eligible for pharmacy and medical benefits during the study period. Total mean medical costs were assessed for the 12-month follow-up period and were compared across the treatment groups after statistical adjustment for age, sex, and days to treatment initiation. Medical costs were calculated from inpatient admissions, emergency room visits, outpatient physician visits, other prescription drugs, and diagnostic/laboratory services. **RESULTS:** A total of 6110 patients initiated treatment with TOL ER (mean age 55 y, 77% women), 3325 with OXY ER (mean age 55 y, 73% women), and 893 with OXY IR (mean age 57 y, 61% women). Patients who received OXY ER ($9063) and OXY IR ($10,523) had significantly higher adjusted annual mean medical costs than did patients who received TOL ER ($8073, $p = 0.0175$ and $p = 0.0001$, respectively). **CONCLUSIONS:** Diagnosing and managing patients with OAB is challenging, especially as it relates to pharmacologic treatment. Observed lower medical costs of TOL ER patients in this study may have broad implications. Results from this study warrant further analysis that fully incorporates adjustments for the factors associated with treatment selection as well as disease-specific drivers of health care costs.

PUK5

ECONOMIC EVALUATION OF EVEROLIMUS WITH REDUCED-DOSE CYCLOSPORINE IN DE NOVO RENAL TRANSPLANT RECIPIENTS: AN INTERNATIONAL PERSPECTIVE

Ethgen O[1], Keown P[2], Yang X[3], Ricci JF[3], Spaepen E[1], Annemans L[1]
[1]IMS Health, Brussels, Belgium; [2]Vancouver General Hospital, Vancouver, British Colombia, Canada; [3]Novartis Pharma AG, Basel, Switzerland

OBJECTIVE: To assess the economic impact of everolimus 1.5 mg with reduced-dose cyclosporine (CsA) vs. mycophenolate motefil (MMF2g) with full dose CsA in de novo renal transplant recipients. **METHODS:** A previous trial (B201) which prospectively collected resource utilization during one-year showed similar economic outcomes for everolimus vs. MMF2g with full-dose CsA. Direct medical costs (excluding everolimus, CsA and MMF) were mostly dependent on key clinical events: hemodialysis, length of stay (LOS) due to adverse events (AE) or infection (INF), biopsy proven acute rejection (BPAR) and days on cytomegalovirus (CMV) therapy. A subsequent trial of everolimus with reduced-dose CsA demonstrated similar efficacy (A2306). A multivariate model was fitted on the B201 data to predict direct medical costs. Coefficients were then applied to the A2306 data to predict the economic outcomes of everolimus with reduced-dose CsA. As no significant country-specific cost effect on LOS was found, individual country cost vectors were applied (Germany, France and Spain). **RESULTS:** For Germany, incremental costs were 250€ per hemodialysis session ($p < 0.001$), 261€ per day of hospitalization due to AE ($p < 0.001$), 343€ per day of hospitalization due to INF ($p < 0.001$) and 4473€ per BPAR ($p < 0.001$). After adjusting for recipient age, living donors, and CMV therapy between B201 and A2306, everolimus with reduced-dose CsA decreased 1-year costs by 3260€ vs. MMF with full-dose CsA. Taking into account cost of CsA, MMF and everolimus (assuming parity pricing of everolimus 1.5 mg and MMF 2 g), everolimus with reduced-dose CsA decreased total 1-year costs in Germany by 3960€. In Spain and France, the final cost-savings would be 1516€ and 3217€, respectively. **CONCLUSION:** In de novo kidney transplant recipients over a 1-year follow-up period, everolimus 1.5 mg with reduced-dose CsA is a cost-saving strategy compared to MMF-based regimen. Further analyses in other health care settings are needed to fully document the cost-saving of everolimus 1.5 mg.

PUK6

A PHARMACOECONOMIC EVALUATION OF OXYBUTYNIN AND TOLTERODINE FOR THE TREATMENT OF OVERACTIVE BLADDER

Ko Y, Malone DC, Armstrong EP
University of Arizona, Tucson, AZ, USA

OBJECTIVES: To develop a decision analytic model comparing the cost-effectiveness of various preparations of oxybutynin and tolterodine in the treatment of overactive bladder (OAB). **METHODS:** The model included immediate-release oxybutynin (OxyIR), extended-release oxybutynin (OxyER), transdermal oxybutynin (OxyTD), immediate-release tolterodine (TolIR), and extended-release tolterodine (TolER). Treatment success was defined as complete continence (no incontinence episodes). The model was constructed from the payer's perspective, assuming incontinence pads were a covered benefit. The timeframe for the model was three months. Costs included were medications, incontinence pads, and treatment of OAB-induced morbidities (i.e., urinary tract infections, fractures, depression, and skin infections). The selection of clinical outcomes data was based on the following priority: 1) FDA approval label; 2) randomized